

Appln. No. 09/955,858
Response dated February 10, 2006
Reply to Office Action dated September 27, 2005

REMARKS/ARGUMENTS

Reconsideration of the present application, as amended, is respectfully requested.

The September 27, 2005 Office Action and the Examiner's comments have been carefully considered. In response, claims are amended and added, and remarks are set forth below in a sincere effort to place the present application in form for allowance. The amendments are supported by the application as originally filed. Therefore, no new matter is added.

REJECTION UNDER 35 USC 112

In the Office Action claims 10-18 are rejected under the second paragraph of 35 USC 112 as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Specifically, the Examiner states that claims 10 and 14 include language which renders the claims indefinite. In response, claims 10 and 14 are amended in a sincere effort to overcome the indefiniteness rejection. In view of the amendment of claims 10 and 14, reconsideration and withdrawal of the objection to claims 10 and 14 under the second paragraph of 35 USC 112 are respectfully requested.

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PRIOR ART REJECTIONS

In the Office Action claims 10-12 and 14-18 are rejected under 35 USC 102(b) as being anticipated by USP 4,471,386 (Tuhro et al.). Claim 13 is rejected under 35 USC 103 as being unpatentable over Tuhro et al. in view of USP 5,874,219 (Rava et al.).

In response, claim 10 is amended to more clearly define the present claimed invention over the cited references.

A feature of the present claimed invention resides in that the method includes the steps of: (1) scanning a first scanning region to acquire image data of the sample; (2) measuring a light amount on a boundary between the first scanning region and a second scanning region that is adjacent to the first scanning region; (3) moving the boundary in a direction of the first scanning region based on a measured value of the light amount; and (4) scanning the second scanning region beginning at the moved boundary to acquire image data of the sample.

The present claimed invention provides a precise image as follows. When light from a sample is measured on the boundary between scanning regions, the boundary is moved in order to prevent the boundary from dividing the data into double data of two regions. As a result, each region divided by the moved boundary obtains proper image data that is not duplicated.

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Tuhro (USP 4,471,386) discloses that a user applies a suitable retro-reflective material to a document to form control marks 60, 61, in order to distinguish an image area on the document where scanning is not desired from an image area where scanning is desired, thereby delineating the boundaries of the image areas.

Tuhro et al. differs from the present claimed invention in a number of ways, including moving a boundary and the handling of image data within the regions divided by the moved boundary.

In the present claimed invention, the boundary is moved to prevent duplication of data (spot image data) on the boundary in the two regions. By moving the boundary, proper image data in which the sample image is not duplicated on the boundary can be obtained in each region. As a result, the spot image data is not divided in two regions on the boundary.

In Tuhro et al., to define the area which is scanned but is not stored, a pair of control marks (which serve as boundaries) are added to the document so as to prevent the undesirable scanning area from being scanned. In Tuhro et al., the boundaries are provided to separate an area of a document where scanning is not desired from the area where scanning is desired (see col. 1, lines 47-51 and col. 3, lines 46-48 of Tuhro et

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al.). Therefore, the image data within one of the regions divided by the boundaries is neither stored nor used.

That is, the present claimed invention as defined by claim 10 is patentable over Tuhro et al. because Tuhro et al. do not disclose, teach or suggest, inter alia:

scanning a first scanning region to acquire image data of the sample;

measuring a light amount on a boundary between the first scanning region and a second scanning region that is adjacent to the first scanning region;

moving the boundary in a direction of the first scanning region based on a measured value of the light amount; and

scanning the second scanning region beginning at the moved boundary to acquire image data of the sample (see claim 10, lines 8-17).

None of the other references of record close the gap between the present claimed invention as defined by claim 10 and Tuhro et al. Therefore, claim 10 is patentable over all of the references of record under 35 USC 102 as well as 35 USC 103.

Claims 11-18 are either directly or indirectly dependent on claim 10 and are patentable over the cited references in view of their dependence on claim 10 and because the references do not disclose, teach or suggest each of the limitations set forth in claim 10.

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Claims 15-18 are amended to place these claims in better form for consideration by the Examiner and to place the claims in better form for allowance. The amendments to claims 15-18 are not related to the patentability of the claims.

NEW CLAIMS

New claims 19-21 are added to the present application. Claims 19 and 20 are dependent on claim 10 and further define and limit the method defined by claim 10. Claims 19 and 20 are patentable over the cited references in view of their dependence on claim 10 and because the references do not disclose, teach or suggest each of the limitations set forth in claims 19 and 20.

Claim 21 is an independent claim. Claim 21 is directed to an image data acquiring method of acquiring scanning image data by scanning a sample having a plurality of targets to be measured with light, and receiving light from the sample.

In new claim 21, the image is input and stored for every strip region and the brightness of the final line of the strip region is compared with the threshold value for each strip region. If the final line of the strip region is equal to or greater than the threshold value, the number of scanning lines is reduced (i.e., the final line is shifted to narrow the strip

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region). Then the data of the strip region is stored and a next strip region is scanned.

In Tuhro et al., when image input is initiated, the brightness is checked for every scanned line. If the brightness exceeds the threshold value, the input data is not stored (abandoned), and if the brightness lowers the threshold value, the storage of the input data is restarted. Therefore, in Tuhro et al., continued image data cannot be obtained.

None of the other references of record close the gap between the present claimed invention as defined by claim 21 and Tuhro et al.

Therefore, claim 21 is patentable over all of the references of record under 35 USC 102 as well as 35 USC 103.

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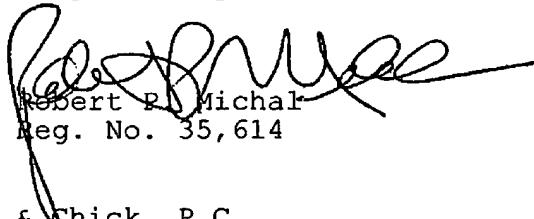
Entry of this Amendment, allowance of the claims and the passing of this application to issue are respectfully solicited.

If the Examiner disagrees with any of the foregoing, the Examiner is respectfully requested to point out where there is support for a contrary view.

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If the Examiner has any comments, questions, objections or recommendations, the Examiner is invited to telephone the undersigned at the telephone number given below for prompt action.

Respectfully submitted,


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Encl.: Petition For Extension of Time